Appendix L

Marine Mammal and Sea Turtle Vessel Strike Avoidance Plan

Port Ambrose Project License Application

September 2012

Volume III, Attachment I

DRAFT MARINE MAMMAL AND SEA TURTLE VESSEL STRIKE AVOIDANCE MEASURES AND INJURED/DEAD PROTECTED SPECIES REPORTING PLAN

September 2012 Confidential

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Figure 1. NOAA Port of New York/New Jersey Seasonal Management Area (SMA)

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Appendix A. NOAA Fisheries Service Guidance for Vessel Strike Avoidance, Right Whale Protection Measures and Reporting for Mariners

1.0 Introduction

Liberty Natural Gas, LLC (Liberty) is proposing to construct, own, and operate a deepwater port, known as Port Ambrose (Port Ambrose, or the Project) in the New York Bight. Port Ambrose consists of two basic sets of components:

<u>Offloading Buoys</u>: two Submerged Turret Loading[™] buoy (STL Buoy) systems (collectively, the Port), which will receive and transfer natural gas from purpose-built LNG regasification vessels (LNGRVs) to the pipeline system; and

<u>Offshore Pipeline Facilities</u>: two offshore subsea lateral pipelines (Laterals) connected to a subsea natural gas mainline (the Mainline).

The STL Buoy systems will be located in water depths of approximately 103 feet [ft] (31 meters [m]), in federal waters roughly 19 miles [mi] (30 kilometers [km]) off Jones Beach, New York, and approximately 31 mi (50 km) from the entrance to New York Harbor. Natural gas will be delivered through the STL Buoy systems and Laterals into a buried, 21.67 mi (34.87 km) subsea mainline, which will connect offshore with the existing Transco Lower New York Bay lateral for delivery to shore. When not in use, each STL Buoy will be lowered to rest on a landing pad on the ocean floor.

The National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS or NOAA Fisheries) has determined that collisions with vessels can injure or kill protected species (e.g., marine mammals and sea turtles). Liberty has developed this Draft Marine Mammal and Sea Turtle Vessel Strike Avoidance Measures and Injured/Dead Protected Species Reporting Plan (Plan) to outline the specific measures that will be implemented to minimize the risk associated with vessel strikes or disturbance to protected species during construction, operation, maintenance, repair and/or decommissioning of the proposed Project. The protection measures included in this Plan were prepared in accordance with the following NOAA Fisheries rules and guidelines (provided in Appendix A):

- Compliance Guide for Right Whale Ship Strike Reduction Rule (50 CFR 224.105) (NOAA Fisheries 2009a);
- Guide to Reporting Whale Sightings (NOAA Fisheries 2007);
- Steps Mariners Can Take to Avoid Collisions with Critically Endangered Right Whales (NOAA Fisheries 1999);
- Shipboard Right Whale Protection Program (NOAA Fisheries 2009b);
- Sea Turtle and Smalltooth Sawfish Construction Conditions (NOAA Fisheries 2006); and
- Vessel Strike Avoidance Measures and Reporting for Mariners (NOAA Fisheries 2008).

Although the NOAA Fisheries guidelines, "Vessel Strike Avoidance Measures and Reporting for Mariners" and "Sea Turtle and Smalltooth Sawfish Construction Conditions" were prepared by the NOAA Fisheries Southeast Region, Liberty understands that the potential for adverse impacts from the Project would be minimized by compliance with these guidelines and, thus, has included these protection measures in this Plan. This Plan will be submitted to NOAA Fisheries and the U.S. Fish and Wildlife Service to review and comment on conservation and recovery issues of concern and to assist in the development of a Final Plan.

2.0 Protected Species Identification Training

Liberty will conduct mandatory protected species identification training for construction, operation, maintenance, repair and decommissioning vessel operations. Vessel crews will use a mid-Atlantic reference guide that helps identify protected species (e.g., whales, other marine mammals, and sea turtles) that might be encountered in the Project area. Training also will be provided regarding information and resources available regarding federal laws and regulations for protected species, ship strike information, critical habitat, migratory routes and seasonal abundance, and recent sightings of protected species.

Additionally, officers and crew members will receive basic training on right whale protection, including identification and reporting, as outlined in NOAA Fisheries *Shipboard Right Whale Protection Program* (Appendix A). Liberty will distribute and require all vessel operators view the most recent version of the NOAA/U.S. Coast Guard (USCG) produced training CD entitled "A *Prudent Mariner's Guide to Right Whale Protection*" (available at http://www.nero.noaa.gov/shipstrike/doc/mtr.html) and ensure that lookouts are aware of relevant information. This interactive CD program provides key educational and support information intended for shipboard operations in areas where North Atlantic right whales may be present. The interactive video presentation provides crew training information about right whales, including an introduction to right whales, recommended navigational actions when operating in right whale habitat, and a guide to reporting sightings of dead or injured right whales.

3.0 Vessel Strike Protection Measures

Liberty will implement the following vessel strike protection measures during construction, operation, maintenance, repair and decommissioning vessel operations.

3.1 Marine Mammals

- 1. Vessel operators and crews must maintain a vigilant watch for marine mammals and slow down or stop their vessels to avoid striking sighted protected species.
- 2. When whales are sighted, maintain a distance of 100 yards [yd] (91 m) or greater between the whale and the vessel.
- 3. When small cetaceans (e.g., dolphins) are sighted, attempt to maintain a distance of 50 yd (46 m) or greater between the animal and the vessel whenever possible.
- 4. When cetaceans are sighted while a vessel is underway, attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.
- 5. Reduce vessel speed to 10 knots or less when mother/calf pairs, pods, or large assemblages of cetaceans are observed near an underway vessel, when safety permits. A single cetacean at the surface can indicate the presence of submerged animals in the vicinity of the vessel; therefore, prudent precautionary measures will always be exercised.
- 6. Whales can surface in unpredictable locations or approach slowly moving vessels. When an animal is sighted in the vessel's path or in close proximity to a moving vessel, reduce speed

and shift the engine to neutral. Do not engage the engines until the animals are clear of the area.

- 7. If the whale is within 100 yd (91 m) of a construction or support vessel underway, it will be observed and the vessel will proceed with caution, following the guidelines below:
 - Resume vessel course at slow speeds;
 - Stay on parallel course with whale, following behind, or next to, at an equal or lesser speed;
 - Do not cross path of whale;
 - Do not attempt to steer or direct whale away;
 - If a whale exhibits evasive or defensive behavior, stop the vessel until the whale has left the immediate area; and
 - Do not allow the vessel to come between a mother and her calf.
- 8. Practical speeds will be maintained to the extent possible. Guidelines for speeds include the following:
 - No wake/idle speeds where the draft of the vessel provides less than a 4-foot (1 m) clearance from the bottom. All vessels will follow routes of deep water whenever possible;
 - · Avoid sudden changes in speed and direction;
 - Speeds during port installation operations will be kept under 10 knots; and
 - Higher speeds will be used only if safety reasons warrant (e.g., medical emergency).
- Members of the vessel crew will be required to undergo NOAA Fisheries recommended training prior to activity. Topics in the training course include reporting procedures, collision emergency procedures, and marine mammal presence detection.
- During construction and/or decommissioning, lookouts are required to scan for surfacing mammals and report sightings to the captain, who will notify Liberty's Environmental Coordinator.
- 11. During construction of the facility, an Environmental Coordinator will be on site and will be responsible for communicating with NOAA Fisheries, as appropriate.
- 12. Vessel crews will be required to report sightings of any injured or dead protected species immediately (regardless of whether the injury or death is caused by the crew's vessel) to the appropriate NOAA Fisheries or regional hotline number listed in Section 4 below.

3.2 Additional Requirements for the North Atlantic Right Whale

- If a sighted whale is believed to be a North Atlantic right whale, federal regulation requires a minimum distance of 500 yd (457 m) be maintained from the animal (50 CFR 224.103 (c)).
- 2. Vessels entering North Atlantic right whale critical habitat are required to report into the Mandatory Ship Reporting System.
- 3. Mariners must check with various communication media for general information regarding avoiding ship strikes and specific information regarding North Atlantic right whale sighting

locations. These media include NOAA weather radio, USCG NAVTEX broadcasts, and Notices to Mariners. As noted above, mariners calling on local ports are required to view the most recent version of the NOAA/USCG produced training CD entitled "A Prudent Mariner's Guide to Right Whale Protection" (available at http://www.nero.noaa.gov/shipstrike/doc/mtr.html).

- Injured, dead, or entangled right whales will be reported immediately to the USCG via VHF Channel 16.
- 5. To reduce the potential for vessel strikes to right whales, Liberty will abide by the Compliance Guide for Right Whale Ship Strike Reduction Rule (50 CFR 224.105) (NOAA Fisheries 2009). In accordance with this rule, Liberty will require all vessels 65 ft (20 m) or longer travel at a speed of 10 knots or less during the migratory season (November 1 through April 30 each year), when consistent with safe navigation. The seasonal notification area in the Project area includes approaches and departures within a 20-nautical-mile (nmi) (37 km) radius, as measured seaward of the Port of New York and New Jersey Seasonal Management Area (SMA) from the COLREGS line 40°29'42.2"N 073°55'57.6"W, as depicted in Figure 1.
- Vessels may operate at a speed greater than 10 knots within the SMA only if necessary to maintain a safe maneuvering speed in an area where conditions severely restrict vessel maneuverability, as determined by the vessel master.
- 7. Vessels will notify NOAA if they are unable to transit at the requested 10 knots or less in the SMA. Vessels will be requested to provide NOAA with the following information and document on the SMA Variance Report Form:
 - Date and time of entry into/exit from SMA;
 - Ship speed through SMA;
 - Reason increased speed was necessary (e.g., weather conditions affecting maneuverability); and
 - Special actions taken.

3.3 Sea Turtles

- 1. All personnel associated with the Project will be advised of the potential presence of sea turtles and the need to avoid collisions.
- 2. All vessel crew members and contractors will participate in a fisheries training for sea turtle presence and emergency procedures in the unlikely event a sea turtle is struck by a vessel.
- 3. All construction personnel are responsible for observing water-related activities for the presence of these species.
- 4. All construction personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing sea turtles when protected under the ESA.
- 5. If a sea turtle is seen within 100 yd (91 m) of a moving vessel, all appropriate precautions will be implemented to ensure its protection.
- 6. All vessels associated with construction of the Project will operate at "no wake/idle" speeds at all times while in the immediate construction area and in water depths where the draft of

the vessel provides less than a 4-foot (1 m) clearance from the bottom. All vessels will follow deepwater routes (e.g., marked channels) whenever possible.

- 7. During construction of the facility, an Environmental Coordinator will be on site to document the effectiveness of the protection measures.
- 8. Any collision with or injury to a sea turtle will be required to be reported immediately to the appropriate Northeast Region hotline numbers listed in Section 4 below.

4.0 Injured/Dead Protected Species Reporting

Vessel crews must report sightings of any injured or dead protected species (marine mammals and sea turtles) immediately, regardless of whether the injury or death is caused by a Project-related vessel, to NOAA Fisheries and/or local Marine Mammal and Sea Turtle Stranding hotlines. All vessels will follow NOAA Fisheries Guide to Reporting Whale Sightings (NOAA Fisheries 2007). The appropriate Northeast Region hotline numbers in the Project area are as follows:

- Entangled whales: 800-900-3622
- Dead, ship-struck, or injured whales, sea turtles, or other protected species: 978-281-9351
- General right whale sightings: 978-585-8473
- Sightings in any location can be reported to the US Coast Guard on Channel 16

In the event of a strike or sighting, the following information will be provided:

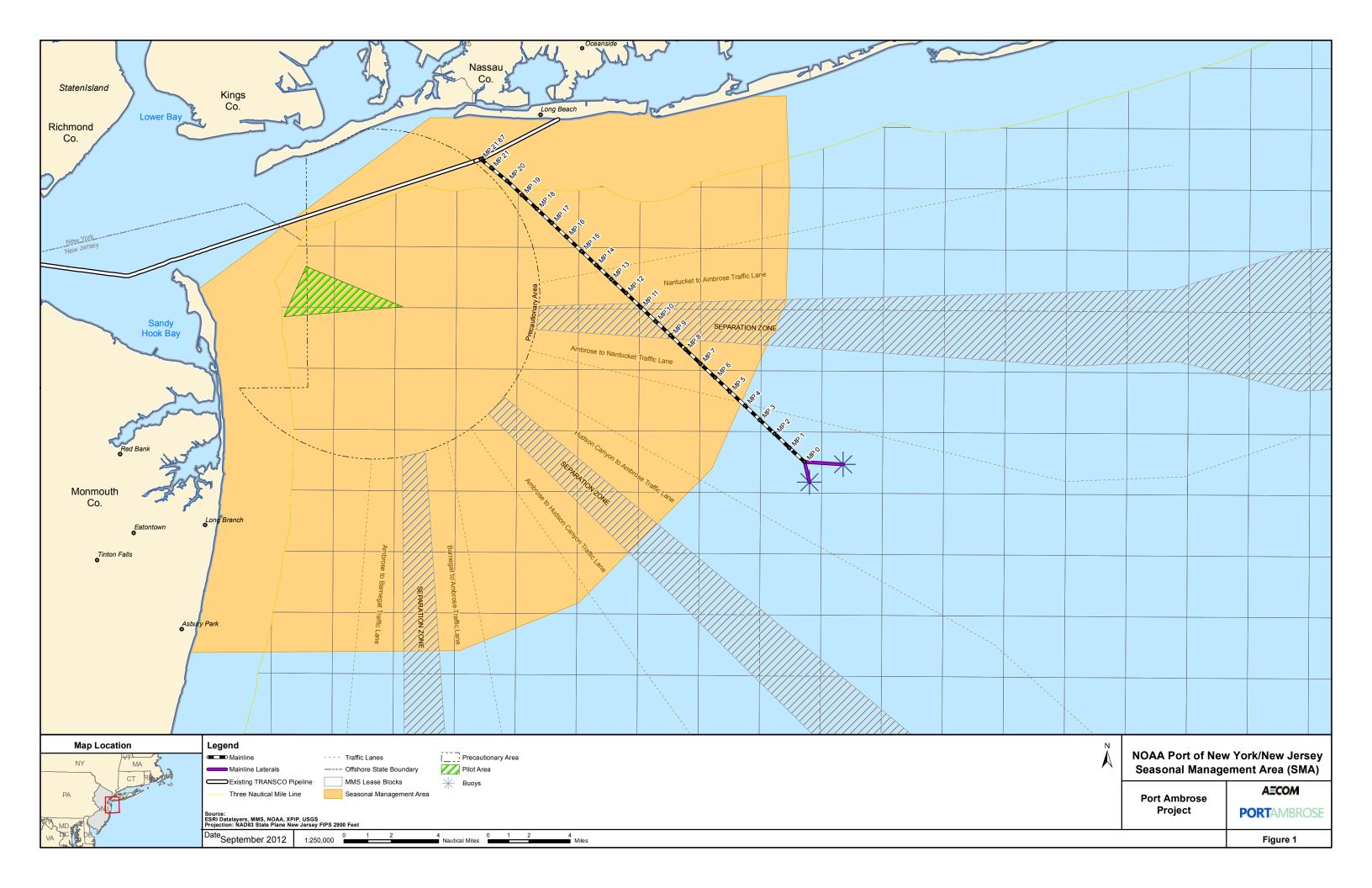
- Location and time of the accident or sighting;
- Speed and size of the vessel;
- Water depth, wind speed, and wind direction;
- Description of the impact;
- Fate of the animal, if known;
- Distinctive features and estimated length of the animal;
- How personnel can be contacted;
- Signs of injury or entanglement; and
- Description of behavior, any injuries, and/or entangling gear.

The National Marine Fisheries Service is the federal agency responsible for protecting whales and sea turtles within U.S. waters under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Any activity that appears to be an intentional or negligent action leading to a collision or harassment incident will be reported to the NOAA Enforcement Hotline at 800-853-1964.

5.0 References

- Note: All References outlined below are included in Appendix A.
- NOAA Fisheries. 1999. Steps Mariners Can Take to Avoid Collisions with Critically Endangered Right Whales. Available online at: http://www.Steps Mariners can tale to avoid collisions. Accessed on April 2, 2012.
- NOAA Fisheries. 2006. Sea Turtle and Smalltooth Sawfish Construction Conditions. Southeast Regional Office. Available online at: http://sero.nmfs.noaa.gov/pr/endangered%20species/Sea%20Turtle%20and%20Smalltooth%20Sawfish%20Construction%20Conditions%203-23-06.pdf. Accessed on April 2, 2012.
- NOAA Fisheries. 2007. Guide to Reporting Whale Sightings. Available online at: http://www.nero.noaa.gov/prot_res/mmv/Guide%20to%20reporting%20Whale%20Sightings.pdf. Accessed on April 2, 2012.
- NOAA Fisheries. 2008. Vessel Strike Avoidance Measures and Reporting for Mariners, Southeast Region office. Available online at: http://sero.nmfs.noaa.gov/pr/pdf/Vessel%20Strike%20Avoidance%20with%20Ship%20Strike%20Form-February%202008-web%20version.pdf. Accessed on April 2, 2012.
- NOAA Fisheries. 2009a. Compliance Guide for Right Whale Ship Strike Reduction Rule (50 CFR 224.105). OMB Control Number: 0648-0580. Available online at: http://www.nero.noaa.gov/shipstrike/. Accessed on April 2, 2012.
- NOAA Fisheries. 2009b. Shipboard Right Whale Protection Program. Available online at: http://sero.nmfs.noaa.gov/pr/mm/rightwhales/pdf/NOAA_RW_Notebook%20ALL%202-6-09.pdf. Accessed on April 2, 2012.

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Appendix A

NOAA Fisheries Service Guidance for Vessel Strike Avoidance, Right Whale Protection Measures and Reporting for Mariners



NOAA FISHERIES SERVICE

Mandatory speed restrictions of 10 knots or less are required in Seasonal Management Areas along the U.S. East Coast during times when right whales are likely to be present. The purpose of this regulation is to reduce the likelihood of deaths and serious injuries to these endangered whales that result from collisions with ships.



Vessels may operate at a speed greater than 10 knots only if necessary to maintain a safe maneuvering speed in an area where conditions severely restrict vessel maneuverability as determined by the pilot or master.

If a deviation from the 10 knot speed restriction is necessary, the following information must be entered into the logbook:

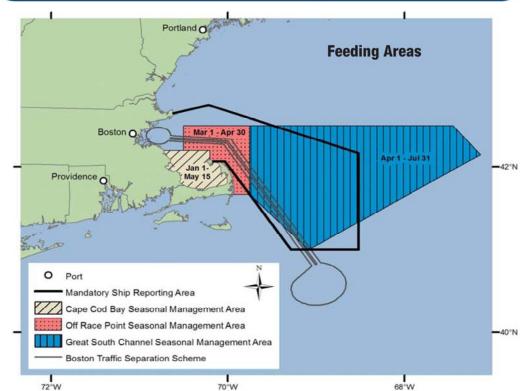
- Reasons for deviation
- Speed at which vessel is operated
- Latitude and longitude at time of deviation
- Time and duration of deviation
- Master of the vessel shall sign and date the logbook entry

Compliance Guide for Right Whale Ship Strike Reduction Rule (50 CFR 224.105)

ATTENTION: All vessels greater than or equal to 65 ft (19.8 m) in overall length and subject to the jurisdiction of the United States and all vessels greater than or equal to 65 ft in overall length entering or departing a port or place subject to the jurisdiction of the United States.

YOU MUST SLOW TO SPEEDS OF 10 KNOTS OR LESS IN SEASONAL MANAGEMENT AREAS

Northeast U.S. Seasonal Management Areas



Feeding Areas

Cape Cod Bay January 1 - May 15

Includes all waters of Cape Cod Bay with Northern Boundary of 42°04'56.5"N, 070°12'W to 42°12'N, 070°12'W then due west back to shore. Off Race Point March 1 - April 30

Waters Bounded by: 42°04'56.5"N 070°12'W 42°12'N, 070°12'W 42°12'N, 070°30'W 42°30'N, 070°30'W 42°30'N, 069°45'W 41°40'N, 069°45'W then due west back to shore. Great South Channel
April 1 - July 31

Waters Bounded by: 42°30'N, 069°45'W 42°30'N, 067°27'W 42°09'N, 067°08'24"W 41°00'N, 069°05'W 41°40'N, 069°45'W then back to starting pt.

The rule does not apply to waters inshore of COLREGS lines.

Migratory Route

November 1 through April 30

Vessel speed is restricted in the following areas:

- ·Block Island Sound waters bounded by:
 - 40°51'53.7" N 070°36'44.9" W 41°20'14.1" N 070°49'44.1" W
 - 41°04'16.7" N 071°51'21.0" W
 - 40°35'56.5" N 071°38'25.1" W
 - then back to starting point.
- Within a 20-nm (37 km) radius of the following (as measured seaward from the COLREGS lines):
 - -Ports of New York/New Jersey:
 - 40°29'42.2"N 073°55'57.6"W
 - -Entrance to the Delaware Bay (Ports of Philadelphia and Wilmington):
 - 38°52'27.4"N 075°01'32.1"W
 - -Entrance to the Chesapeake Bay (Ports of Hampton Roads and Baltimore):
 - 37°00'36.9"N 075°57'50.5"W
 - -Ports of Morehead City and Beaufort, NC: 34°41'32.0"N 076°40'08.3"W
- Within a continuous area 20 nm from shore between Wilmington, NC, to Brunswick, GA, bounded by the following:

Point	Latitude	Longitude
Α	34°10'30"N	077°49'12"W
В	33°56'42"N	077°31'30"W
C	33°36'30"N	077°47'06"W
D	33°28'24"N	078°32'30"W
E	32°59'06"N	078°50'18"W
F	31°50'00"N	080°33'12"W
G	31°27'00"N	080°51'36"W
	and west bac	k to the shore.

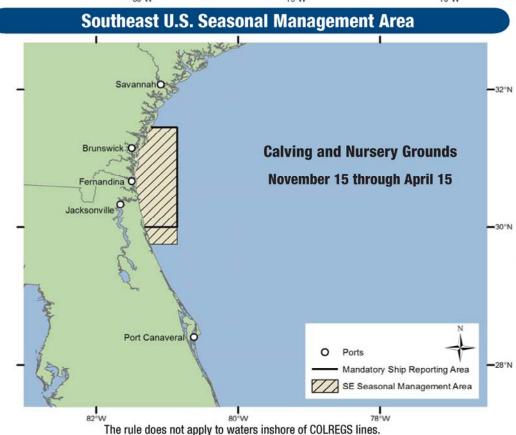
Calving and Nursery Grounds November 15 through April 15

Vessel speed is restricted in the area bounded to the north by latitude 31°27'N; to the south by latitude 29°45'N; to the east by longitude 080°51'36"W.

For more information, visit: http://www.nmfs.noaa.gov/pr/shipstrike http://nero.noaa.gov/shipstrike http://rightwhalessouth.nmfs.noaa.gov

Right Whale Ship Strike Reduction Rule expires on December 9, 2013





Voluntary Dynamic Management Areas (DMAs) may also be established by NOAA Fisheries Service. Mariners are encouraged to avoid these areas or reduce speeds to 10 knots or less while transiting through these areas. NOAA Fisheries Service will announce DMAs to mariners through its customary maritime communication media.

This serves as NOAA's small entity compliance guide.

OMB Control #0648-0580



Guide to Reporting Whale Sightings

Please help NOAA's National Marine Fisheries Service (NMFS) collect vital information on right whales and dead, entangled, or injured whales of any species by immediately calling one of the numbers below when these critical sightings are made. Please make taking video or photographs a priority. Images of critical sightings are extremely valuable.

If any whale is sighted near gear or appears to be in distress, check for signs of entanglement or injury. However, if no entanglement or injury has been noted, then there is no need to keep the whale in sight.

If a right whale is sighted, please bear in mind that federal law prohibits all approaches to right whales within 500 yards except under special circumstances. For more information, please visit http://rwhalesightings.nefsc.noaa.gov/.

If an entangled, injured, or dead whale <u>is</u> sighted, please try to keep the whale in sight until you can report the sighting to NMFS responders. Do not attempt to disentangle a whale unless authorized.

Reporting Strategy

For any critical sighting, be prepared with the following information:

- Date, time, and location of the sighting
- ✓ Distinctive features and estimated length of animal
- Signs of injury or entanglement
- Description of behavior, injuries, and entangling gear
- ✓ If the whale is dead, the condition of the carcass
- How you can be contacted (i.e. contact information for original report; how an observer can be contacted)

In the Northeast Region call the appropriate pager:

Entangled whales: 800-900-3622

Dead, ship-struck, or injured whales: 978-281-9351

General right whale sightings: 978-585-8473

In the <u>Southeast Region</u> (includes the Gulf of Mexico): Entangled, dead, ship-struck, or injured whales: 877-433-8299

All other right whale sightings: 877-433-8299.

In both regions, reports can also be relayed through U.S. Coast Guard stations.



Northeast Region: ME - VA and offshore north of 36°35'N Southeast Region: NC - TX and offshore south of 36°35'N

Right Whale Critical Habitat Areas: **

Cape Cod Bay: 42°04.8'N, 70°10'W; 42°12'N, 70°15'W; 42°12'N, 70°30'W; 41°46.8'N, 70°30'W

Great South Channel: 41°00'N, 69°05'W; 41°40'N, 69°45'W; 42°10'N, 68°31'W; 41°38'N, 68°13'W

Southeast: 31°15'N to 30°15'N & offshore 15 nm; 30°15'N to 28°00'N & offshore 5 nm

** Right whales follow a migratory path close to shore along the entire U.S. eastern seaboard. This migration is primarily in the early spring and late fall.

Identifying Right Whales

Several features should be observed to confirm species identification. These may include:

- Rough white patches ('callosities') on the head.
- ✓ Dorsal fin absent when the whale arches on a dive. (But be cautious--other species may not show their dorsal fin until they arch up for a deep dive.)
- ✓ Flukes (tails) have smooth trailing edges and taper gradually to narrow pointy tips. (Only right whales, humpbacks, and sperm whales routinely lift their tails when diving.)
- Distinct 'V'-shaped blow when viewed from directly behind or head on (but not from the side).

From the air, right whales are best identified by the presence of the callosities on the head. Their body shape is more robust than other whale species, and the flukes are proportionally larger. The flippers are typically harder to see.





(above)
Right whale fluke
(to the right)
Humpback whale
fluke
NEFSC/PSB



(above) Right whale aerial view, note Vshaped spout NEFSC/PSB



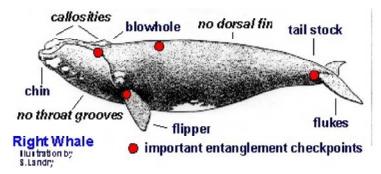
Spotting Entangled Whales

Spotting entangled whales requires careful observation. Whenever a whale is sighted, look for buoys or lines moving or unusually clumped near the whale or trailing some distance behind. Gear may also be seen wrapped over the whale's back, flippers, tail stock, or through the mouth.

Photographs or video of an entanglement are extremely valuable, especially when they document areas where the gear is entangled on the whale.

Be sure to stay well clear of an entangled whale to avoid spooking it or running over any trailing gear.

The right whale illustration below shows both important entanglement checkpoints and the primary body features. Key right whale features are *italicized*



Identifying Dead Whale Species at Sea

Whale carcasses are typically seen floating belly up. Due to predation and weathering, carcasses may differ significantly from the pictures below. Rely on described body structures for identification. If possible, closely examine the carcass for signs of injuries, such as gashes, bruises, or line marks.

Video or photographs are extremely valuable, especially close-ups of the areas around the tail stock, flukes, flippers, and any injuries.

Dead right whales

- Throat grooves absent (belly may have white patches or be completely black.)
- ✓ Flippers squarish in shape and, when the whale is belly-up, both may be up out of the water
- ✓ If floating on its side, note strongly arched mouth that contains long (6+ foot) baleen



Dead right whale (belly up; tail closest) NEFSC/Sea Sampling



Dead right whale (floating on side; head to the right), note arched mouth and baleen (arrows). DFO

(space below provided for sighting notes)

Date/Time: Location (lat/long):

Notes:

Dead humpback whales

- ✓ Throat grooves present
- ✓ Flippers white and about 1/3 the length of the body with knobby bumps on front edge
- Trailing edge of tail flukes ragged-looking with large barnacles on tips
- Several grapefruit-sized knobby black bumps on chin and snout



Dead humpback whale (head to the left)

NEFSC/PSB

Dead finback whales

- Throat grooves present (narrower and more numerous than on humpbacks)
- ✓ Flippers smooth, slender, and fairly short
- ✓ Tail flukes have smooth trailing edges and taper to narrow pointy tips
- Chin smooth and relatively slender



Dead finback whale (head to the right)

NEFSC/PSB

Dead minke whales are physically similar to finbacks but are smaller (less than 30 feet long), and their throat grooves do not extend as far aft.

A good reference for identifying other species is: *Guide to Marine Mammals & Turtles of the U.S. Atlantic & Gulf of Mexico* (c) 1999. Rhode Island Sea Grant. To order, call 401-874-6842



Steps Mariners Can Take To Avoid Collisions with Critically Endangered Right Whales

When transiting right whale critical habitat:

- As soon as possible prior to entering right whale critical habitat, check U.S. Coast Guard Broadcast Notice to Mariners, NAVTEX, NOAA Weather Radio, Cape Cod Canal Vessel Traffic Control, the Bay of Fundy Vessel Traffic Control, and other sources for recent right whale sighting reports.
- When entering ports on the U.S. east coast, refer to Coast Pilot and Notice to Mariners, review right whale identification material
 described in those documents, and maintain a sharp watch with lookouts familiar with spotting whales. Ask port officials, port
 pilots, and Coast Guard officers for additional information on right whales.
- When planning passage through right whale critical habitat, attempt to avoid night-time transits, and whenever practical, minimize travel distances through the area. Anticipate delays due to whale sightings.
- When the ability to spot whales is reduced (e.g. night, fog, rain, etc.), mariners should bear in mind that reduced speed may minimize the risk of ship strikes.

In all coastal and offshore waters along the east coast of the U.S. and Canada:

- If a right whale sighting is reported within 20 nautical miles of a ship's position, post a lookout familiar with spotting whales.
- If a right whale is sighted from the ship, or reported along the intended track of a large vessel, mariners should exercise caution
 and proceed at a slow, safe speed when within a few miles of the sighting location, bearing in mind that reduced speed may
 minimize the risk of ship strikes.
- Do not assume right whales will move out of your way. Right whales, generally slow moving, seldom travel faster than 5-6 knots. Consistent with safe navigation, maneuver around observed right whales or recently reported sighting locations. It is illegal to approach closer than 500 yards of any right whale (see 50 CFR 222.32, Chapter 2).
- Any whale accidentally struck, any dead whale carcass spotted, and any whale observed entangled in fishing gear should be
 reported immediately to the U.S. or Canadian Coast Guard noting the precise location and time of the accident or sighting.

In the event of a strike or sighting, the following information should be provided to the U.S. Coast Guard:

- Location and time of the accident or sighting.
- Speed of the vessel.
- · Size of the vessel.
- Water depth.

- · Wind speed and direction.
- · Description of the impact.
- · Fate of the animal, if known.
- Species and size, if known.

Right whales can occur anywhere along the east coast of the U.S. and Canada. Mariners are urged to exercise prudent seamanship in their efforts to avoid right whales.

For more information, contact:

National Marine Fisheries Service Northeast Region One Blackburn Drive Gloucester, MA 01930-2289

Lindy Johnson works in NOAA's Office of General Counsel, International Affairs; Gregory Silber is the Coordinator of Large Whale Recovery Activities for the Office of Protected Resources, National Marine Fisheries Service.



Shipboard

Right Whale PROTECTION PROGRAM

- 1) Introduction to the Shipboard Right Whale Protection Program
- 2) Crew and Watchstander Training
- 3) Sighting Information Sources and Collection
- 4) Precautionary Measures for the Prudent Mariner
- 5) Mandatory Ship Reporting Requirements, Guidelines for Mariners Placards, and Compliance Guide for Right Whale Ship Strike Reduction Rule.

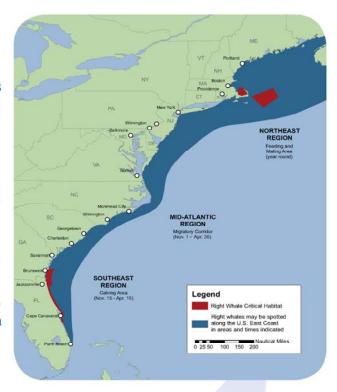
Updated 2/2009



1) Introduction

The North Atlantic right whale population is severely at risk of extinction following centuries of commercial whaling dating back to the 1600s, and more recently from direct and indirect impacts from human activities – mostly in the form of ship strikes and entanglement in fixed fishing gear.

From late winter through summer, right whales aggregate in North Atlantic waters from Cape Cod to Nova Scotia, often near busy shipping lanes. The whales use this area for feeding and mating activities. In the fall, pregnant females travel from this area to their only known calving area off South Carolina, Georgia, and northeastern Florida, where they give birth and nurse their young. When spring arrives, mothers and their calves make the long journey back north.



The right whales' migration route, which hugs the U. S. Atlantic coastline, leads them through nearshore waters laden with heavy ship traffic. The whales spend a considerable amount of time at or near the water's surface, and most of the time, they are oblivious to dangers around them. To make matters worse, right whales are slow swimmers and they have dark skin and no dorsal fin, which makes them very difficult to see.

With as few as 300 North Atlantic right whales remaining, the species' recovery is dependent upon the protection of each remaining whale. This Shipboard Right Whale Protection Program has been developed with input from ships' masters and crews to provide a simple framework for reducing the risk of collisions between ships and right whales.



1) Introduction (Continued)

The Program consists of four key elements:

Crew and Watchstander Training – Officers and crew members should receive basic training on right whale protection including identification and reporting.

Analysis of Sighting Information and Right Whale Management Areas – Right whale sighting information is available from a variety of sources. In addition to Seasonal Management Areas where right whales are likely to be present, right whale sightings may trigger Dynamic Management Areas (DMAs) where precautionary measures are strongly recommended. Sighting information and active DMA locations should be collected and evaluated for possible voyage planning alternatives and navigational practices.

Navigational Practices to Reduce the Risk of Right Whale Interactions- Ships operating in areas where right whales are likely to be present can implement navigational practices that reduce the risk and potential severity of ship strikes.

Compliance with regulations:

Right Whale Ship Strike Reduction Rule— The Right Whale Ship Strike Reduction Rule requires all vessels greater than or equal to 65 ft. (19.8 m) in length and subject to jurisdiction of the United States, and all vessels greater than or equal to 65 ft. in overall length entering or departing a port or place subject to jurisdiction of the United States to slow to speeds of 10 knots or less in Seasonal Management Areas where right whales are likely to be present.

Mandatory Ship Reporting Requirements - Upon entering specific areas where right whales are likely to be present, the U.S. Coast Guard requires ships to report their arrival by satellite communications.

Right Whale Approach Rule- It is illegal to intentionally approach within 500 yards of a right whale.



2) Crew and Watchstander Training

To reduce the risk of collisions with right whales, it is important that a ship's crew is competent in spotting and identifying right whales by both their appearance and their behavior. When the vessel is operating in areas where right whales may occur, the bridge management team must be familiar with and be prepared to implement precautionary measures to reduce the risk of adverse interactions.

Recommended Crew Training

Mates on watch, helmsmen, and lookouts, as well as any other regular deck personnel, should complete the following minimal training:

- View the contents of "A Prudent Mariner's Guide to Right Whale Protection" CD inside the front cover of this program, including "About the Right Whales," "What to Do," and the "Prudent Mariner Video."
- Crew members should be encouraged to take the 12-question quiz on the CD.
- Read and Study "Right Whales Guidelines for Mariners" Placard (Section 5 of this program).

In addition, deck officers should be familiar with the following information:

- Read and be familiar with the right whale information published in Chapter 3 of each East Coast volume of the U.S. Coast Pilot (volumes 1-4).
- Understand and be able to comply with the Mandatory Ship Reporting System requirements outlined on the CD and on the MSR Placard in Section 5 of this program. (The Mandatory Ship Reporting section of the CD can be used to compose the required MSR message)

Tracking Crew Training

On the following page is a suggested form to be used to track crew training for the Right Whale Protection Program. It is provided as an aid to management and is not a mandatory form.



2) Record of Crew's Training for Right Whale Protection

Rate/Name	A Prudent Mariner's Guide to Right Whale Protection CD	Right Whales -Guidelines for Mariners Placard	Coast Pilot Information	Mandatory Ship Reporting System
		1.75		



3) Sighting Information Sources

The right whale protection community has established a network of agencies, organizations, and processes to collect and disseminate information about right whale locations to mariners. The sighting information is managed differently in the northeast and southeast areas of the United States. Right whale sightings, in any region, may trigger Dynamic Management Areas (DMAs) where precautionary measures are strongly recommended. Information about DMAs can be found at the NOAA Fisheries Service website, http://www.nmfs.noaa.gov/pr/shipstrike.

In the Northeast U. S. (Gulf of Maine and Cape Cod Bay and approaches)

Right whale aerial surveys are flown year-round. An array of passive acoustic detection buoys are also active 24/7 in the northern portion of the Boston TSS. The location of active DMAs, which are triggered by persistent feeding aggregation in the northeast, are distributed to mariners via NOAA's Right Whale Sighting Advisory System (SAS) faxes and e-mails, NOAA Weather Radio broadcasts, NAVTEX messages, Coast Guard Broadcast Notice to Mariners, Cape Cod Canal Vessel Traffic Control, Bay of Fundy Vessel Traffic Control, Harbor Pilot Associations, in reply messages to Mandatory Ship Reporting messages and at the NOAA Fisheries Service website. Acoustic detections can be accessed at www.listenforwhales.org.

In the Mid-Atlantic U. S. (Block Island Sound through North Carolina)

Dedicated aerial survey effort is limited in this region; however, when opportunistic sightings are made or reported to NOAA, alerts may be distributed via SAS faxes and e-mails, NOAA Weather Radio broadcasts, NAVTEX messages, and Coast Guard Broadcast Notice to Mariners.

In the Southeast U. S. (Coastal South Carolina through Central Florida)

During the winter calving season (November through April), dedicated aerial survey teams collect right whale sighting information. Sightings are published as Coast Guard Broadcast Notice to Mariners, NAVTEX messages, NOAA Weather Radio Broadcasts and in reply messages to Mandatory Ship Reporting messages. Harbor Pilot Associations and local Coast Guard offices are also aware of recent sighting information. Information regarding active DMAs can be found at the NOAA Fisheries Service website.

Auto-Reply E-Mail:

An auto-reply e-mail containing recent sighting information can be obtained by sending an e-mail to:

In the northeast: ne.rw.sightings@noaa.gov
In the southeast: se.rw.sightings@noaa.gov



3) Source Summary

Mariners should be diligent in collecting information about right whale and DMA locations from all available sources to conduct the most prudent voyage planning, particularly before arriving to and departing from ports.

Southeast U.S.	Northeast U.S.
Reply message to Mandatory Ship Reporting Message	Reply message to Mandatory Ship Reporting Message
Broadcast Notice to Mariners	Broadcast Notice to Mariners
NAVTEX	NAVTEX
NOAA Weather Radio	NOAA Weather Radio
Harbor Pilot Associations	Harbor Pilot Associations
Auto Reply E-Mail	Auto Reply E-Mail
NOAA Fisheries	NOAA Fisheries
http://www.nmfs.noaa.gov/pr/shipstrike	http://www.nmfs.noaa.gov/pr/shipstrike
	Bay of Fundy Vessel Traffic Control
	Cape Cod Canal Vessel Traffic Control
	www.listenforwhales.org (for Boston TSS transits)

*Note: To receive SAS e-mails or faxes, send an e-mail to ne.rw.sightings@noaa.gov requesting to be added to the SAS distribution list.

Right whale sighting information and/or DMA locations for each voyage should be collected and compiled in this section of the management program. Sightings should be evaluated, and if they fall within 30 nautical miles of the vessel's proposed track line, they should be plotted on the ship's navigational chart and considered possible hazards to navigation.



4) Precautionary Measures

When vessels are operating in areas where right whales are known to be present, such as Seasonal Management Areas (SMAs) or Dynamic Management Areas (DMAs), or if a sighting report has been made along the vessel's intended track line, the following actions are recommended or required by NOAA Fisheries Service:

- Reduce Speed Vessel speeds of 10 knots or less greatly reduce the risk of fatal collisions with right whales. Vessels greater than or equal to 65 ft. (19.8 m) in length and subject to jurisdiction of the United States and all vessels greater than or equal to 65 ft. in overall length entering or departing a port or place subject to jurisdiction of the United States, must slow to speeds of 10 knots or less in SMAs. (See the Local Notice to Mariners or the "Compliance Guide for Right Whale Ship Strike Reduction Rule" in Section 5 for specific times, areas, and exceptions to this law.) In addition, mariners are advised to route around active DMAs or transit thought them at 10 knots or less. See Section 3, "Sighting Information Sources," to find out how to obtain right whale sightings and active DMA locations.
- Maneuver Around Whales Right whales are slow swimmers, spend a considerable amount of time at or near the surface, and often seem oblivious to dangers around them. Intentionally approaching within 500 yards of right whales is prohibited and is a violation of federal law. Vessels should alter course by a wide margin to avoid whales. Routing around active DMAs greatly reduces the risk of striking a right whale.
- Post Lookouts Post lookouts familiar with spotting right whales.
- Avoid Transits When Visibility Is Poor Fog, rain, and darkness significantly reduce visibility.
- Use Recommended Routes Vessels should use the recommended two-way whale avoidance routes to reduce the incidence of whale interactions. These routes have been published on U. S. Nautical Charts for approaches to the ports of Jacksonville and Fernandina Beach, Florida and Brunswick, Georgia, as well as the approaches and areas within Cape Cod Bay. (See the "Recommended Routes Fact Sheet" contained in this section. Additional graphics are available on the "A Prudent Mariner's Guide to Right Whale Protection" CD in a separate "Media" folder.)
- **Notify Others** Alert other vessel captains in the area when a right whale is sighted.



REDUCE COLLISIONS WITH NORTH ATLANTIC RIGHT WHALES

USE TWO-WAY ROUTES TO AVOID WHALES NOVEMBER - APRIL

PURPOSE:

To minimize collisions (vessel strikes) with endangered right whales during the winter calving season from November through April. These two-way routes were established based on historical patterns of right whale congregations during this timeframe.

WHO, WHERE, WHEN:

The two-way routes shown in the chart to the right are strongly STRONGLY RECOMMENDED for use by all vessels when traveling into or out of the Florida ports of Jacksonville and Fernandina Beach, as well as Brunswick Harbor, Georgia, from November through April.

HOW:

The two-way routes may, at times, have opposing vessel traffic and all mariners should navigate with caution. Mariners are warned that some vessels might not be able to keep to the starboard side of the routes at all times.

Caution: Full bottom coverage surveys have not been conducted within the entire routes, so uncharted dangers may exist.

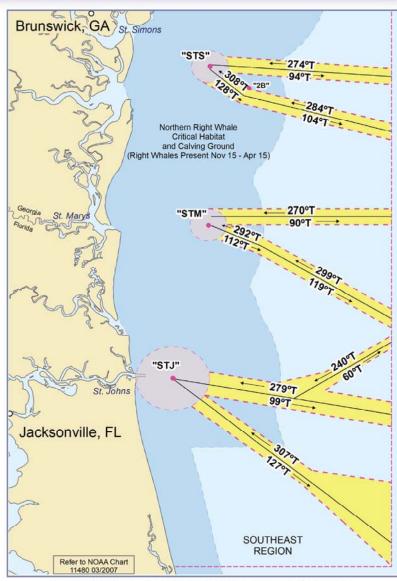
TRANSITING BETWEEN ADJACENT PORTS:

When transiting between adjacent ports within the critical habitat area, it is not necessary to use the two-way routes; however, mariners should consider minimizing travel distance through this area when consistent with safe navigation.





For more information, visit: www.nmfs.noaa.gov/pr/shipstrike/



This chart is for information purposes only and is not to be used for navigation. For navigation, refer to NOAA Chart 11480 03/2007.

The area shaded in blue is a calving area for North Atlantic right whales November 15 through April 15. This area encompasses the northern portion of designated critical habitat for the whales (see 50 CFR 226.203(c)). The dashed red line extending out from the Florida coastline and heading up the right-hand side of the chart is the Mandatory Ship Reporting boundary line.

REMEMBER:

When within the calving area, NOAA Fisheries Service recommends vessels reduce speed to 10 knots or less when consistent with safe navigation to reduce the risk of collision with right whales.

It is illegal to approach right whales closer than 500 yards (See 50 CFR 224.103(c), regulations, and exceptions).



REDUCE COLLISIONS WITH NORTH ATLANTIC RIGHT WHALES

USE TWO-WAY ROUTES TO AVOID WHALES JANUARY - MAY

PURPOSE:

To minimize collisions (vessel strikes) with endangered right whales during the winter/spring feeding season in Cape Cod Bay (January through May). These two-way routes and two-way track were established based on historical patterns of right whale congregations during this timeframe.

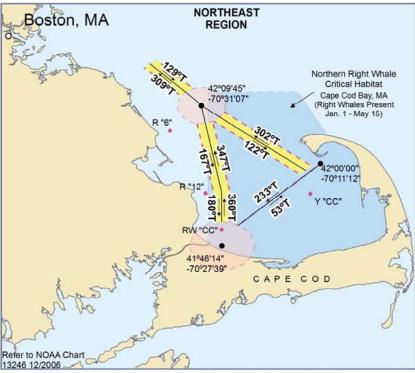
WHO, WHERE, WHEN:

The two-way routes and track shown in the chart to the right are STRONGLY RECOMMENDED for use by all vessels when transiting within or through Cape Cod Bay from January through May. The majority of Cape Cod Bay is designated Right Whale Critical Habitat.

HOW:

The two-way routes and track may, at times, have opposing vessel traffic and all mariners should navigate with caution. Mariners are warned that some vessels might not be able to keep to the starboard side of the routes at all times.

Caution: Full bottom coverage surveys have not been conducted within the entire routes, so uncharted dangers may exist.



This chart is for information purposes only and is not to be used for navigation. For navigation, refer to NOAA Chart 13246 12/2006.

The area shaded in blue is designated critical habitat for North Atlantic right whales (see CFR 226.203(c)). This area is a critical feeding area for the whales between January and May each year.

REMEMBER:

When within Cape Cod Bay, NOAA Fisheries Service recommends vessels reduce speed to 10 knots or less when consistent with safe navigation to reduce the risk of collision with right whales.

It is illegal to approach right whales closer than 500 yards (See 50 CFR 224.103(c), regulations, and exceptions).





For more information, visit: www.nmfs.noaa.gov/pr/shipstrike/



NOAA FISHERIES SERVICE

Reduce Collisions with North Atlantic Right Whales



Use Two-Way Routes To Avoid Whales

NORTHEAST REGION

JANUARY - MAY

PURPOSE:

To minimize vessel collisions with endangered right whales during the winter/spring feeding season in Cape Cod Bay (January through May). These two-way routes and two-way track were established based on historical patterns of right whale distribution during this time frame.

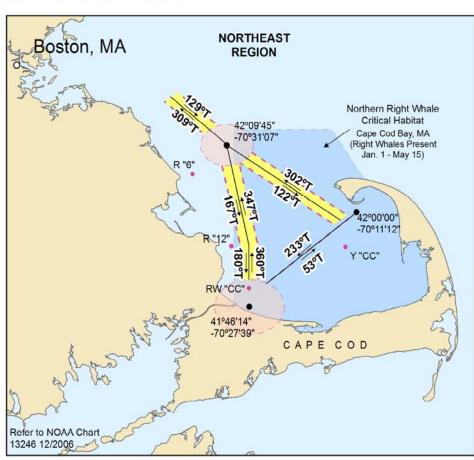
WHO, WHERE, WHEN:

The two-way routes and track shown in the chart to the right are STRONGLY RECOMMENDED for use by all vessels when transiting within or through Cape Cod Bay from January through May. The majority of Cape Cod Bay is designated Right Whale Critical Habitat.

HOW:

The two-way routes and track may, at times, have opposing vessel traffic and all mariners should navigate with caution. Mariners are warned that some vessels may not be able to keep the starboard side of the routes at all times.

CAUTION: Full bottom coverage surveys have not been conducted within the entire routes, so uncharted dangers may exist.



This chart is for informational purposes only and is not to be used for navigation.

For navigation, refer to the current version of NOAA Chart 13246.

The area shaded in blue is designed critical habitat for North Atlantic right whales 50 CFR 226.203(b)).

This area is a critical feeding area for whales between January and May each year.

REMEMBER:

- Speed restrictions of 10 knots or less are mandatory in Seasonal Management Areas along the U.S. East Coast during times when right whales are likely present (See 50 CFR 224.105).
- It is illegal to approach right whales closer than 500 yards (See 50 CFR 224.103 (c), regulations, and exceptions).

For more information visit: www.nmfs.noaa.gov/pr/shipstrike/ or www.nero.noaa.gov/shipstrike/



Right Whale Mandatory Ship Reporting System



Commercial ships of 300 gross tons and greater **must report** in when entering designated right whale reporting areas along the U.S. East Coast. All ships equipped with INMARSAT C must report in IMO standard format as provided in the table below. For more information on reporting procedures consult 33 CFR Part 169, the Coast Pilot, or the Mandatory Ship Reporting (MSR) System web site at:

http://www.nmfs.noaa.gov/prot_res/PR2/Conservation_and_Recovery_Program/msr/msrhome.html

Mandatory Reporting Requirements: (Report to: rightwhale.msr@noaa.gov or Telex: 48156090)

Paragraph	Function	Information Required			
System Name Area Identifier		Reporting system area name (WHALESSOUTH).			
М	INMARSAT Number	9-digit vessel INMARSAT number.			
A Ship		Vessel name and call sign.			
В		6-digit group giving day of month and time, single letter indicating time zone, and three letters indicating month.			
E	True course	3-digit number indicating true course.			
F	Speed in knots and tenths	3-digit group indicating knots and tenths.			
Н	Date, time, and point of entry into system	Date and time expressed as in (B) and latitude/ longitude expressed as a 4-digit group giving latitude, the letter N indicating north, followed by a /, a 5-digit group giving longitude, and the letter W indicating west.			
I	Destination and ETA	Name of port and arrival time expressed as in (B).			
L	Route information and speed	Route information should be reported as direct rhumbline to port (RL) and intended speed or a series of way points (WP). Vessels reporting waypoints should include latitude and longitude, expressed as in (H), and intended speed between waypoints. For vessels transiting within a traffic separation scheme (TSS), give only the WP on entry and departure of TSS.			

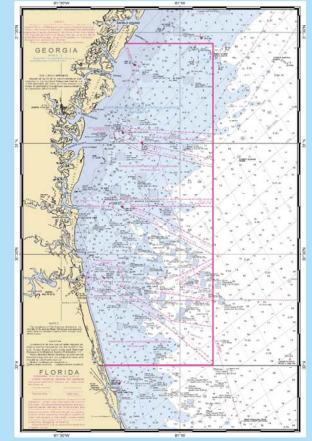
WHALESSOUTH BOUNDARY

The area (NAD 83) extends from shoreline eastward to longitude 80°51.6'W with the southern and northern boundaries at latitude 30°00'N and 31°27'N., respectively.

*Vessels not equipped with INMARSAT C must report via alternate satellite communications equipment to rightwhale.msr@noaa.gov or Telex: 48156090.

*Vessels unable to use satellite communications equipment should contact the U.S. Coast Guard Communication Area Master Station, Chesapeake, VA via published voice frequencies on 2182 kHz, 4125 kHz, 6215 kHz, 8291 kHz, 12290 kHz, 16420 kHz 24 hours per day or by phone at 1-800-742-8519 ext. 0.

WHALESSOUTH (15 November to 16 April)



EXAMPLE REPORT:

Please follow the format exactly as outlined below.

WHALESSOUTH//
M/412345678//
A/BEAGLE/NVES//
B/270810Z MAR//
E/250//
F/17.0//
H/270810ZMAR/3030N/080
52W//
I/MAYPORT/271215Z
MAR//
L/RL/17.0//

WARNING

DO NOT INCLUDE ADDITIONAL MESSAGES OR CHARACTERS IN YOUR REPORT. FAILURE TO FOLLOW THE EXACT FORMAT WILL CAUSE THE MSR COMPUTER SYSTEM TO REJECT YOUR REPORT.



Right Whale Mandatory Ship Reporting System



Commercial ships of 300 gross tons and greater **must report** in when entering designated right whale reporting areas along the U.S. East Coast. All ships equipped with INMARSAT C must report in IMO standard format as provided in the table below. For more information on reporting procedures consult 33 CFR Part 169, the Coast Pilot, or the Mandatory Ship Reporting (MSR) System web site at:

http://www.nmfs.noaa.gov/prot_res/PR2/Conservation_and_Recovery_Program/msr/msrhome.html

Mandatory Reporting Requirements: (Report to: rightwhale.msr@noaa.gov or Telex: 48156090)

Paragraph	Function	Information Required
System Name	Area Identifier	Reporting system area name (WHALESNORTH).
М	INMARSAT Number	9-digit vessel INMARSAT number.
Α	Ship	Vessel name and call sign.
В		6-digit group giving day of month and time, single letter indicating time zone, and three letters indicating month.
Е	True course	3-digit number indicating true course.
F	Speed in knots and tenths	3-digit group indicating knots and tenths.
Н	Date, time, and point of entry into system	Date and time expressed as in (B) and latitude/longitude expressed as a 4-digit group giving latitude, the letter N indicating north, followed by a /, a 5-digit group giving longitude, and the letter W indicating west.
ı	Destination and ETA	Name of port and arrival time expressed as in (B).
L	Route information and speed	Route information should be reported as direct rhumbline to port (RL) and intended speed or a series of way points (WP). Vessels reporting waypoints should include latitude and longitude, expressed as in (H), and intended speed between waypoints. For vessels transiting within a traffic separation scheme (TSS), give only the WP on entry and departure of TSS.

WHALESNORTH BOUNDARY

The area coordinates (NAD 83) are as follows: from a point on Cape Ann, Massachusetts at 42°39'N, 70°37'W; then northeast to 42°45'N, 70°13'W; then southeast to 42°10'N, 68°31'W; then south to 41°00'N, 68°31'W; then west to 41°00'N, 69°17'W; then northwest to 42°05'N, 70°02'W, then west to 42°04'N, 70°10'W; and then along the Massachusetts shoreline of Cape Cod Bay and Massachusetts Bay back to the point on Cape Ann at 42°39'N, 70°37'W.

WHALESNORTH

NOAA Chart #13009

*Vessels not equipped with INMARSAT C must report via alternate satellite communications equipment to rightwhale.msr@noaa.gov or Telex: 48156090.

*Vessels unable to use satellite communications equipment should contact the U.S. Coast Guard Communication Area Master Station, Chesapeake, VA via published voice frequencies on 2182 kHz, 4125 kHz, 6215 kHz, 8291 kHz, 12290 kHz, 16420 kHz 24 hours per day or by phone at 1-800-742-8519 ext. 0.

EXAMPLE REPORT:

Please follow the format exactly as outlined below.
WHALESNORTH//
M/487654321//
A/CALYPSO/NRUS//
B/031401Z APR//
E/345//
F/15.5//
H/031410Z
APR/4104N/06918W//
I/BOSTON/032345Z APR//
L/WP/4210N/06952W/15.5//
L/WP/4230N/07006W/15.5//

WARNING

DO NOT INCLUDE ADDITIONAL MESSAGES OR CHARACTERS IN YOUR REPORT. FAILURE TO FOLLOW THE EXACT FORMAT WILL CAUSE THE MSR COMPUTER SYSTEM TO REJECT YOUR REPORT.

Update 11/2008

OMB Control #1625-0103

Right Whales

Current Right Whale Conservation Efforts

R ight whales are listed as an endangered species in the U.S. and in Canada. There are two federally mandated Implementation Teams coordinating right whale recovery efforts under the authority of the Endangered Species Act. A Mandatory Ship Reporting scheme was introduced in 1999 to inform mariners of right whale locations. In addition, the National Marine Fisheries Service has designated three of

the right whales' seasonal feeding and calving areas as critical habitats that are essential to the whales' continued survival. In Canada, Marine Mammal Regulations, pursuant to the Fisheries Act, address marine mammal issues.



Since 1999, federal law has required mariners of large commercial vessels to report into a Mandatory Ship Reporting System as they enter two critical habitat areas: one off Massachusetts which operates year round and one off Georgia and Florida which operates from 15 November to 15 April. Ships over 300 gross tons or more are required to report their vessel name, call sign, course, speed, location, destination and route. In return, mariners receive a reply message which has positions of recent right whale sightings, avoidance procedures which may prevent a collision and lists additional sources for right whale information such as NAVTEX, INMARSAT C Safety Net, US Coast Pilots and Notice to Mariners.

Canada

The Canadian government has established Conservation Areas for right whales in the Grand Manan Basin and Roseway Basin. Ships operating in these areas from June to November are asked to follow seasonal guidelines to decrease the possibility



of collisions. For more information, contact the Department of Fisheries and Oceans, Maritime Aquatic Species at Risk Office (902) 426-6947.



You can help protect whales and their marine habitats

- Operate safely around whales and other marine mammals. U.S. federal law requires a 500 yard buffer zone around right whales. (50 CFR Part 224.103)
- Never throw trash into the ocean dispose of it properly. Plastics can kill wildlife, including whales. (MARPOL* Annex V; 33 CFR 151)
- Never release poisonous or toxic substances. These can harm whales, fish, plankton and corals. (MARPOL Annexes I and II; 33 CFR 151 and 40 CFR 117)
- Support conservation, research and education initiatives.
- Participate in the Mandatory Ship Reporting Scheme

*International Convention for the Prevention of Pollution from Ships

www.rightwhales.org

The publication of this brochure has been made possible through grants and donations from the Massachusetts Port Authority and the following organizations:



NOAA, National Marine Fisheries Service One Blackburn Drive Gloucester, MA 01930 978-281-9300

The Center for Coastal Studies P.O. Box 1036, Provincetown, MA 02657

Entanglement Hotline 1-800-900-3622 http://www.provincetown.com/coastalstudies/



Gulf of Maine Council on the **Marine Environment**

Secretariat - Massachusetts (1997-98) Coastal Zone Management 100 Cambridge Street, Room 2006 Boston, MA 02202-0021 • 617-727-9530 http://qulfofmaine.unh.edu/cme.html



The International Fund for Animal Welfare 411 Main Street, Yarmouth Port, MA 02675 508-744-2000





UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office 263 13th Avenue South St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc





Vessel Strike Avoidance Measures and Reporting for Mariners NOAA Fisheries Service, Southeast Region

Background

The National Marine Fisheries Service (NMFS) has determined that collisions with vessels can injure or kill protected species (e.g., endangered and threatened species, and marine mammals). The following standard measures should be implemented to reduce the risk associated with vessel strikes or disturbance of these protected species to discountable levels. NMFS should be contacted to identify any additional conservation and recovery issues of concern, and to assist in the development of measures that may be necessary.

Protected Species Identification Training

Vessel crews should use an Atlantic and Gulf of Mexico reference guide that helps identify protected species that might be encountered in U.S. waters of the Atlantic Ocean, including the Caribbean Sea, and Gulf of Mexico. Additional training should be provided regarding information and resources available regarding federal laws and regulations for protected species, ship strike information, critical habitat, migratory routes and seasonal abundance, and recent sightings of protected species.

Vessel Strike Avoidance

In order to avoid causing injury or death to marine mammals and sea turtles the following measures should be taken when consistent with safe navigation:

- 1. Vessel operators and crews should maintain a vigilant watch for marine mammals and sea turtles to avoid striking sighted protected species.
- 2. When whales are sighted, maintain a distance of 100 yards or greater between the whale and the vessel.
- 3. When sea turtles or small cetaceans are sighted, attempt to maintain a distance of 50 yards or greater between the animal and the vessel whenever possible.
- 4. When small cetaceans are sighted while a vessel is underway (e.g., bow-riding), attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.
- 5. Reduce vessel speed to 10 knots or less when mother/calf pairs, groups, or large assemblages of cetaceans are observed near an underway vessel, when safety permits. A single cetacean at the surface may indicate the presence of submerged animals in the vicinity; therefore, prudent precautionary measures should always be exercised. The vessel should attempt to route around the animals, maintaining a minimum distance of 100 yards whenever possible.

NMFS Southeast Region Vessel Strike Avoidance Measures and Reporting for Mariners; revised February 2008.

6. Whales may surface in unpredictable locations or approach slowly moving vessels. When an animal is sighted in the vessel's path or in close proximity to a moving vessel and when safety permits, reduce speed and shift the engine to neutral. Do not engage the engines until the animals are clear of the area.

Additional Requirements for the North Atlantic Right Whale

- 1. If a sighted whale is believed to be a North Atlantic right whale, federal regulation requires a minimum distance of 500 yards be maintained from the animal (50 CFR 224.103 (c)).
- 2. Vessels entering North Atlantic right whale critical habitat are required to report into the Mandatory Ship Reporting System.
- 3. Mariners should check with various communication media for general information regarding avoiding ship strikes and specific information regarding North Atlantic right whale sighting locations. These include NOAA weather radio, U.S. Coast Guard NAVTEX broadcasts, and Notices to Mariners. Commercial mariners calling on United States ports should view the most recent version of the NOAA/USCG produced training CD entitled "A Prudent Mariner's Guide to Right Whale Protection" (contact the NMFS Southeast Region, Protected Resources Division for more information regarding the CD).
- 4. Injured, dead, or entangled right whales should be immediately reported to the U.S. Coast Guard via VHF Channel 16.

Injured or Dead Protected Species Reporting

Vessel crews should report sightings of any injured or dead protected species immediately, regardless of whether the injury or death is caused by your vessel.

Report marine mammals to the Southeast U.S. Stranding Hotline: 877-433-8299 Report sea turtles to the NMFS Southeast Regional Office: 727-824-5312

If the injury or death of a marine mammal was caused by a collision with your vessel, responsible parties should remain available to assist the respective salvage and stranding network as needed. NMFS' Southeast Regional Office should be immediately notified of the strike by email (takereport.nmfsser@noaa.gov) using the attached vessel strike reporting form.

For additional information, please contact the Protected Resources Division at:

NOAA Fisheries Service Southeast Regional Office 263 13 Avenue South St. Petersburg, FL 33701 Tel: (727) 824-5312

Visit us on the web at http://sero.nmfs.noaa.gov

NMFS Southeast Region Vessel Strike Avoidance Measures and Reporting for Mariners; revised February 2008.

Print Form

Submit by Email

NOAA Fisheries Service

Southeast Region Ship Strike Report

Reporter Information			
Reporting Vessel/Aircraft Name or #	Reporter's Name	Reporter's phone	Date of Report
Chailes Wassell Information (
Strike Vessel Information (com	ipiete ali that apply)		
TYPE OF VESSEL: Check all that apply		less illus	
Container Towing	Other	Draft	Feet Meters
☐ Tanker ☐ Government	Specify	Forward	
Freight Whale watch			
Research Ferry		Aft	
Fishing Recreational		Mean	
Name of Vessel involved in Strike	Gross Tonnage	Vessel Length	
			○ Feet ○ Meters
Vessel Make	Vessel Model	Due Lieu Fran	in a Maka
vessei make	vessei Modei	Propulsion Eng	ine Make
Distance be	tween shafts Horsepower	Prop Diameter Prop Pitch	٦
Observed or Noted Strike Info	rmation (strike was noted vise	ually or impact felt)	
Date of Strike Time of Strike	C Local General Location	North Latitud	de West Longitude
	○ GMT		
ENVIRONMENTAL CONDITIONS AT TIM	NE OF STRIKE		
	D' A CAR IL III	O 1/21	0.0
Lighting Weather Visibi	lity Distance of Visibility	C Miles Air Temperatur	
Wind Speed Direction	(degrees) Current Speed	Miles Direction (degrees)	Degrees C Water depth
Wild Speed Direction	(degrees) Current speed	Direction (degrees)	water depth
Uave Height ☐ Feet		Feet Water Depth	Feet
○ Meters		Meters	○ Meters

NOAA Fisheries Service

Southeast Region Ship Strike Report - Continued

essel Activity	Engine RPM:	Engine Speed (Knots)	Vessel Course (Degrees)	Autopilot ON Autopilot OFF
otal # of watchstanders	# on Navigation Bridg	ge # on Observation Bric	dge # on Bow	Other
CIDENT INFORMATION				
ort of vessel struck by wh	iale Doscribo what w	vas seen, felt, heard, etc.		
re or vesser struck by Wil	Describe what w	vas seen, ieit, neard, etc.		
as avoidance action take	en Describe action	taken, or reasons why avoida	ance not possible	
omments on damage to	vessel			

NOAA Fisheries Service

Southeast Region Ship Strike Report - Continued

ANIMAL INFORMATION					
Time elapsed between sighting and	Distanc	Distance from vessel when first sighted			
Animal's orientation to the vessel			Estimated size/species of whale		
Other manine management	Species				
Other marine mammals present?	Approximate number	Species			
What direction was the whale travel	ng				
Briefly describe whale's behavior pri	ior to strike	Briefly de	scribe whale's behav	vior after collision (if seen)	
Portion of animal struck	Condit	ition post-strike		Blood seen in water after strike	
Description of wounds on animal. U	Jse drawings to mark the	e location of wound	l(s). Include estimate	es of length and depth of wounds.	